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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/420,616	10/18/1999	WILLIAM JOSEPH BEYDA	99P7918US	3051
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/420,616	BEYDA ET AL.				
Office Action Summary	Examiner	Art Unit				
	Frank Duong	2666				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut - Any reply received by the Office later than three months after the mailine armed patent term adjustment. See 37 CFR 1.704(b). Status	136(a). In no event, however, may a reply be timely within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on 29 A	<u>August 2003</u> .					
2a) ☐ This action is FINAL . 2b) ☑ This) This action is FINAL . 2b) ☑ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) □ Claim(s) <u>1-16</u> is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examin 10) The drawing(s) filed on is/are: a) acceptable and applicant may not request that any objection to the Replacement drawing sheet(s) including the correct and the oath or declaration is objected to by the Epriority under 35 U.S.C. §§ 119 and 120	cepted or b) objected to by the lead rawing(s) be held in abeyance. See ction is required if the drawing(s) is object.	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).				
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority documents. Copies of the certified copies of the priority documents application from the International Bureat * See the attached detailed Office action for a list since a specific reference was included in the first 37 CFR 1.78. a) The translation of the foreign language priority Acknowledgment is made of a claim for domest reference was included in the first sentence of the foreign language priority.	Its have been received. Its have been received in Applicationity documents have been received in (PCT Rule 17.2(a)). It of the certified copies not received tic priority under 35 U.S.C. § 119(arst sentence of the specification or revisional application has been received tic priority under 35 U.S.C. §§ 120	on No ed in this National Stage ed. e) (to a provisional application) in an Application Data Sheet. eived. and/or 121 since a specific				
Attachment(s) 1) X Notice of References Cited (PTO-892)	A) T Interview Cummen	(PTO-413) Paper No(s)				
Notice of References Cited (P10-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal P	(PTO-413) Paper No(s) atent Application (PTO-152)				

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DETAILED ACTION

1. This Office Action is a response to the Request for Continued Examination dated 08/29/2003. Claims 1-16 are pending in the application.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claims 1-4, there is no support for the claimed limitation of "means for adjusting a length of said one or more information packets for input to said jitter buffer based on a sized of said jitter buffer", recited in claim 1, lines 6-7, in the specification. In accordance with the specification, on page 6, lines 9-24 and thereinafter, in reference to FIG. 3, it is disclosed "the controller 110 monitors a size of the jitter buffer 113 and the size of data packets being packetized in the packetizer 80. If the packet size is less than a predetermined threshold related to jitter buffer size, then the packet size is increased to the threshold level. If the two endpoints have different sized jitter buffers. then the packet size may be set to the greater of the two". From the disclosed features,

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the claimed limitation of "means for adjusting a length of said one or more information packets for input to said jitter buffer based on a sized of said jitter buffer", recited in claim 1, lines 6-7, cannot unambiguously derive to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Regarding **claims 5-8**, there is no support for the claimed limitation of "adjusting a length of said one or more information packets for input to said jitter buffer based on a sized of said jitter buffer", recited in claim 5, lines 4-5, in the specification. In accordance with the specification, on page 6, lines 9-24 and thereinafter, in reference to FIG. 3, it is disclosed "the controller 110 monitors a size of the jitter buffer 113 and the size of data packets being packetized in the packetizer 80. If the packet size is less than a predetermined threshold related to jitter buffer size, then the packet size is increased to the threshold level. If the two endpoints have different sized jitter buffers, then the packet size may be set to the greater of the two". From the disclosed features, the claimed limitation of "adjusting a length of said one or more information packets for input to said jitter buffer based on a sized of said jitter buffer", recited in claim 5, lines 4-5, cannot unambiguously derive to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Regarding **claims 9-13**, there is no support for the claimed limitation of "wherein each of said plurality of endpoints includes a jitter buffer controller configured to adjust a packet size of packets being input to said jitter buffer for communication over said

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packet network", recited in claim 9, lines 5-7, in the specification. In accordance with the specification, on page 6, lines 9-24 and thereinafter, in reference to FIG. 3, it is disclosed "the controller 110 monitors a size of the jitter buffer 113 and the size of data packets being packetized in the packetizer 80. If the packet size is less than a predetermined threshold related to jitter buffer size, then the packet size is increased to the threshold level. If the two endpoints have different sized jitter buffers, then the packet size may be set to the greater of the two". From the disclosed features, the claimed limitation of "wherein each of said plurality of endpoints includes a jitter buffer controller configured to adjust a packet size of packets being input to said jitter buffer for communication over said packet network", recited in claim 9, lines 5-7, cannot unambiguously derive to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Regarding claims 14-15, there is no support for the claimed limitation of "a controller coupled to the codec, the jitter buffer, and the packetizer, wherein the controller is configured to cause the packetizer to adjust a packet size if said packet size is related to a jitter buffer size according to predetermined criteria, such that packets received at said jitter buffer are of a new size", recited in claim 14, lines 5-8, in the specification. In accordance with the specification, on page 6, lines 9-24 and thereinafter, in reference to FIG. 3, it is disclosed "the controller 110 monitors a size of the jitter buffer 113 and the size of data packets being packetized in the packetizer 80. If the packet size is less than a predetermined threshold related to jitter buffer size, then the packet size is increased to the threshold level. If the two endpoints have different

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sized jitter buffers, then the packet size may be set to the greater of the two". From the disclosed features, the claimed limitation of "a controller coupled to the codec, the jitter buffer, and the packetizer, wherein the controller is configured to cause the packetizer to adjust a packet size if said packet size is related to a jitter buffer size according to predetermined criteria, such that packets received at said jitter buffer are of a new size", recited in claim 14, lines 5-8, cannot unambiguously derive to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Regarding claim 16, the claimed limitation of "adjusting said packet size if said packet size is related to said jitter buffer size threshold according to predetermined criteria", recited in claim 16, lines 5-6, encompasses every possible scenarios. Take for example, the specification does not disclose the encoder, decoder, jitter buffer or the analog/digital converter of Fig. 3 adjusts the packet size. Moreover, the "predetermined criteria" includes packet size is "greater than the threshold". Definitely, it is not disclosed, in the specification, the packet size is adjusted according to the packet size is "greater than the threshold".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(note: Due to the problems discussed in the 112, first paragraph rejection discussed above, new limitations introduced in the communication dated 7/31/03 or 8/29/03 to claims 1-15 are not considered)

3. Claims 9-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Guy et al (USP 5,940,479) (hereinafter "Guy").

Regarding **claim 9**, in accordance with Guy reference entirety, Guy shows a telecommunication system (FIGs. 1 and 3) comprising:

a packet network (104);

a plurality of endpoints (101A and 101B) coupled to said packet network (104), each of said plurality of said endpoints including a jitter buffer (316);

wherein each of said plurality of endpoints including a jitter buffer controller (320) configured to adjust a packet size for communication over said packet network (see col. 9, lines 34-65 and col. 17, line 39 to col. 18, line 14).

Regarding **claim 13**, in addition to features recited in base claim 9 (see rationales pertaining the rejection of base claim 9 discussed above), Guy further discloses wherein said endpoints comprise client terminals (106, 108 and 129).

Regarding **claim 14**, in accordance with Guy reference entirety, Guy shows a telecommunication system (FIGs. 1, 2 and 3) comprising:

a codec (FIG. 2; block 206A);

a jitter buffer (FIG. 2; block 206B and FIG. 3; block 316) coupled to an input of the codec:

a packetizer (FIG. 2; block 206B and FIG. 3; blocks 318 and 320) coupled to an output of the codec; and

a controller (FIG. 2; block 206B and FIG. 3; block 320) coupled to the codec, the jitter buffer, and the packetizer, wherein the controller is configured to cause the packetizer to adjust a packet size if said packet size is related to a jitter buffer size according to predetermined criteria (network delay) (see col. 17, line 30 to col. 18, line 14).

Regarding **claim 15**, in addition to features recited in base claim 14 (see rationales pertaining the rejection of base claim 14 discussed above), Guy further discloses wherein the predetermined criteria (*network delay*) is a threshold fraction of the jitter buffer size (*see col. 17*, *lines 57-58*).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guy.

Regarding **claim 1**, in accordance with Guy reference entirety, Guy discloses a telecommunication node (Fig. 3), comprising:

a jitter buffer (316) (see col. 9, lines 34-39);

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means for receiving (306, 302 and 304) one or more information packets (*voice signals*), said receiving means including means for storing (304) said one or more information packets in said jitter buffer (*see col. 8, lines 56-63*); and

means for adjusting (320) a length of said one or more information packets based on a network delay (see col. 9, lines 59-65 and col. 17, line 39 to col. 18, line 4).

Guy fails to explicitly teach adjusting a length of the packet based on the size of said buffer. However, at col. 9, lines 34-39, 59-65, Guys discloses the voice enhancement unit can also dynamically adjust the rate of the bit stream from 8 kbps to a slower rate, e.g., 6.4 kbps or 4.8 kbps. Moreover, at col. 17, lines 65-67, Guy discloses increasing the jitter buffer 316 also increases the network delay since the jitter buffer 316 stores the voice frames for a time duration that is proportional to the size of the jitter buffer 316. And at col. 10, lines 64-65, Guy also teaches converting a data packet to a compatible format is apparent to persons skilled in the relevant art. All of the above recitation relates to "adjusting a length of the packet based on the size of said buffer" to enhance the voice signal quality as well as compatible format.

Thus, it would have been obvious to those skilled in the art to adjust a length of the packet based on the size of the jitter buffer with a motivation to convert voice signals into a network compatible format.

Regarding **claim 2**, in addition to features recited in base claim 1 (see rationales pertaining the rejection of base claim 1 discussed above), Guy further discloses said adjusting means (320) including means for adjusting said length to a predetermined

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fraction (network delay) of said size of said jitter buffer (see col. 17, line 39 to col. 18, line 13).

Regarding **claim 3**, in addition to features recited in base claim 2 (see rationales pertaining the rejection of base claim 2 discussed above), Guy further discloses means for monitoring (320) a size of said jitter buffer during a communication (see col. 17, lines 60-61).

Regarding **claim 4**, in addition to features recited in base claim 3 (see rationales pertaining the rejection of base claim 3 discussed above), Guy further discloses said adjusting means (320) including means responsive to said monitoring means for adjusting said length to a new size of said jitter buffer (316) during said communication (see col. 17, line 30 to col. 18, line 14).

Regarding **claim 5**, in accordance with Guy reference entirety, Guy discloses a telecommunication method (*FIG. 3*), comprising:

receiving (306, 302 and 304) one or more information packets, said receiving including storing said one or more information packets in a jitter buffer (316) (see col. 17, lines 15-38); and

adjusting (320) a length of said one or more information packets based on a network delay (see col. 17, line 39 to col. 18, line 14).

Guy fails to explicitly teach adjusting a length of the packet based on the size of said buffer. However, at col. 17, lines 65-67, Guy discloses increasing the jitter buffer 316 also increases the network delay since the jitter buffer 316 stores the voice frames for a time duration that is proportional to the size of the jitter buffer 316. And at col. 10,

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lines 64-65, Guy also teaches converting a data packet to a compatible format is apparent to persons skilled in the relevant art.

Thus, it would have been obvious to those skilled in the art to adjust a length of the packet based on the size of the jitter buffer with a motivation to convert voice signals into a network compatible format.

Regarding **claim 6**, in addition to features recited in base claim 5 (see rationales pertaining the rejection of base claim 5 discussed above), Guy further discloses said adjusting (320) including adjusting said length to a predetermined fraction (*network delay*) of said size of said jitter buffer (see col. 17, line 39 to col. 18, line 13).

Regarding **claim 7**, in addition to features recited in base claim 6 (see rationales pertaining the rejection of base claim 6 discussed above), Guy further discloses monitoring (320) a size of said jitter buffer during a communication (see col. 17, lines 60-61).

Regarding **claim 8**, in addition to features recited in base claim 7 (see rationales pertaining the rejection of base claim 7 discussed above), Guy further discloses said adjusting (320) including adjusting said length to a new size of said jitter buffer (316) during said communication (see col. 17, line 30 to col. 18, line 14).

5. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guy in view DataBeam Corporation White Paper (*A Primer on the H.323 Series Standard, pages 1-17, May 15, 1998*) (hereinafter "DataBeam").

Regarding **claims 10-11**, Guy teaches the features recited in base claim 9 (see rationales pertaining the rejection of base claim 9 discussed above). Moreover, at col.

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17, lines 60-62, Guy further discloses jitter buffer 316 has a size that is set by a user as a configuration protocol.

Guy fails to explicitly discloses wherein said buffer controller is configured to compare a proposed packet size with a threshold value representative of a fraction of said jitter buffer size responsive to an H.323 terminal capability exchange (*negotiate channel usage*).

On the other hand, DataBeam (see the document entirety) provides an overview of the H.323 standard providing a foundation for audio, video and data communications across IP-based networks. Specifically, on page 4, DataBeam discloses all H.323 terminals must also support H.245, which is used to negotiate channel usage and capabilities.

It would have been obvious to those skilled in the art to implement the H.323 standard with the negotiating channel usage into Guy's system to arrive the claimed invention with a motivation of allowing users to communicate without concern for compatibility.

Regarding **claim 12**, Guy discloses wherein said jitter buffer controller (320) is configured to monitor a size of said jitter buffer during a communication and adjust a packet to a new size during a communication (see col. 17, line 39 to col. 18, line 14).

Thus, Guy in view DataBeam discloses the claimed invention.

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Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Agrawal et al (USP 5,623,483).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Duong whose telephone number is (703) 308-5428. The examiner can normally be reached on 7:00AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (703) 308-5463. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Frank Duong

November 18, 2003

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